CLAIMS

What is claimed is:

1 1.   A method of automated data collection and analysis, the method comprising the
2 machine-implemented steps of:
3   receiving a request for information about a device;
4   constructing a command set, wherein the command set is a set of executable
5   commands that indicate collection of data from the device and zero or more
6   other devices;
7   sending the command set to the device;
8   receiving analysis results from an analysis engine, wherein the analysis results are
9   based at least in part on a set of results received from the device and produced
10   by executing the command set; and
11   determining a set of solutions based on the analysis results.

1 2.   The method of Claim 1, wherein the command set comprises one or more commands
2 to collect data from two or more devices simultaneously.

1 3.   The method of Claim 1, wherein the command set comprises a first command to
2 collect data from the device at a first time, and a second command to collect data from the
3 device at a second time, wherein the first time is different from the second time.

1 4.   The method of Claim 1, further comprising the step of producing the analysis results
2 based on a result set, where the result set is based at least in part on the execution of the
3 command set.

1 5.   The method of Claim 4, further comprising the step of removing confidential
2 information from the result set.

1   6.   The method of Claim 1, further comprising the step of providing the set of solutions

2   to a user.

1   7.   The method of Claim 1, wherein the step of constructing the command set comprises

2   choosing one or more commands from a list of predefined commands.

1   8.   The method of Claim 7, wherein the step of choosing one or more commands from

2   the list of predefined commands comprises choosing one or more commands based at least in

3   part on the request for information about the device.

1   9.   The method of Claim 1, wherein the step of constructing the command set comprises

2   defining new commands based on the request for information about the device.

1   10.   A method for automated data collection from a network device and analysis of the

2   data, the method comprising the machine-implemented steps of:

3   receiving a request for information about the network device;

4   constructing a command set, wherein the command set is a set of executable

5   commands that indicate collection of data from the network device and zero or

6   more other network devices;

7   sending the command set for execution at the network device;

8   receiving analysis results from an analysis engine, wherein the analysis results are

9   based at least in part on a set of results received from the network device and

10   produced by executing the command set; and

11   determining a set of solutions based on the analysis results.

1   11.   A machine-readable medium carrying one or more sequences of instructions for

2   automated data collection and analysis, which instructions, when executed by one or more

3   processors, cause the one or more processors to carry out the steps of:

4   receiving a request for information about a device;

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5 constructing a command set, wherein the command set is a set of executable

6   commands that indicate collection of data from the device and zero or more

7   other devices;

8 sending the command set for execution at the device;

9 receiving analysis results from an analysis engine, wherein the analysis results are

10   based at least in part on a set of results received from the device and produced

11   by executing the command set; and

12 determining a set of solutions based on the analysis results.

1 12. An apparatus for automated data collection and analysis, comprising:

2 means for receiving a request for information about a device;

3 means for constructing a command set, wherein the command set is a set of

4   executable commands that indicate collection of data from the device and zero

5   or more other devices;

6 means for sending the command set for execution at the device;

7 means for receiving analysis results from an analysis engine, wherein the analysis

8   results are based at least in part on a set of results received from the device

9   and produced by executing the command set; and

10 means for determining a set of solutions based on the analysis results.

1 13. An apparatus for automated data collection and analysis, comprising:

2 a network interface that is coupled to a data network for receiving one or more packet

3   flows therefrom;

4 a processor;

5 one or more stored sequences of instructions which, when executed by the processor,

6   cause the processor to carry out the steps of:

7   receiving a request for information about a device;

8   constructing a command set, wherein the command set is a set of executable

9   commands that indicate collection of data from the device and zero or

10   more other devices;

11   sending the command set for execution at the device;

12   receiving analysis results from an analysis engine, wherein the analysis results

13   are based at least in part on a set of results received from the device

14   and produced by executing the command set; and

15   determining a set of solutions based on the analysis results.

1   14.   A method of automated data collection and analysis, the method comprising the

2   machine-implemented steps of:

3   sending a request for information about a device;

4   receiving a command set in response to the request, wherein the command set is a set

5   of executable commands that indicate collection of data from the device and

6   zero or more other devices;

7   executing the command set;

8   generating a result set based on the execution of the command set;

9   sending the result set to an analysis engine as part of a second request for analysis of

10   the result set; and

11   receiving a solution to one or more problems discovered at least in part by the

12   analysis engine

1   15.   The method of Claim 14, wherein the steps are performed by a command runner

2   module running on a user machine, and wherein the method further comprises the step of

3   determining whether the user machine has the latest version of the command runner module.

1   16.   The method of Claim 15, further comprising the step of:

2   if the user machine does not have a version of the command runner module,

3   downloading the command runner module.

1   17.   The method of Claim 15, further comprising the step of:

2   if the user machine does not have the latest version of the command runner module,

3   downloading a patch to the command runner module.

1   18.   The method of Claim 14, further comprising the step of removing confidential

2   information from the result set.

1   19.   A method of automated data collection and analysis from one or more network

2   devices, the method comprising the machine-implemented steps of:

3   sending a request for information about a network device;

4   receiving a command set in response to the request, wherein the command set is a set

5   of executable commands that indicate collection of data from the network

6   device and zero or more other network devices;

7   executing the command set;

8   generating a result set based on the execution of the command set;

9   sending the result set to an analysis engine as part of a second request for analysis of

10   the result set; and

11   receiving a solution to one or more problems discovered at least in part by the

12   analysis engine.